

**Data Codebook for “How Bureaucratic Leadership Shapes Policy Outcomes:
Partisan Politics and Affluent Citizens’ Incomes in the American States”**
(Daniel Berkowitz and George A. Krause)

VARIABLES

state (State Name)

stateno (State Numeric Identifier)

year (Year Numeric Identifier)

P90x95 (Average Real Gross Income (ARGI), Top 10%: Top 5% of the income fractile):
2003=100, Source, Sommeiller and Price (2014)

P95x99 (ARGI, Top 5%: Top 1% income fractile): 2003=100, Source, Sommeiller and Price
(2014)

P99x995 (ARGI, Top 1%: Top 0.5% income fractile): 2003=100, Source, Sommeiller and Price
(2014)

P995x999 (ARGI, Top 0.5%: Top 0.1% income fractile): 2003=100, Source, Sommeiller and
Price (2014)

P999x9999 (ARGI, Top 0.1%: Top 0.01% income fractile): 2003=100, Source, Sommeiller and
Price (2014)

P9999x100 (ARGI, Top 0.01% income fractile): 2003=100, Source, Sommeiller and Price
(2014)

rinc (State Real Per Capita Income): Total personal income divided by total midyear population,
and personal income is in 1982 dollars (2003=100); we convert this from 1982 dollars to 2003
dollars because Average Real Gross Income (ARGI) for the Top income fractiles is reported in
2003 dollars; to do this, we use the 2003 cpi, Source, Bureau of Economic Analysis (See email
section dated July 19, 2012 for this data and other data from the Bureau of Economic Analysis)

cpi (Consumer Price Index): 1982=100, Source, Bureau of Labor Statistics

cpi2003 (Consumer Price Index): 2003=100, Source, Bureau of Labor Statistics

shnfinc (State Non-Farm Income Share): non-farm income divided by total income, Source,
Bureau of Economic Analysis

citi8608 (State Citizen Ideology): panel measure of the ideology of state’s citizens, Source,
Berry et al, 2010.

MTR_total_s_reed (Overall Marginal Tax Rate (State Revenues Only)): estimated dynamic marginal tax rates for a given state-year), Source, Reed, Rogers and Skidmore (2011); and, see section below for details on construction of this variable and data sources.

realmedianbureaucraticsalary (Real Median Bureaucratic Salary): core *Bureaucratic Leadership Capacity* variable measured as median 2000 constant-dollar adjusted salary compensation for major state agency heads across 35 high-level executive offices that pertain to major administrative functions of each state for a given year; data for the 1986-1989 period are compiled by the authors and come from state-year taken from the *Book of the States* (1986-1991); data for the 1990-2008 were compiled by Boushey and McGrath (2017) and, they generously shared their data with us; we exclude several offices that are routinely engaged in political activities (e.g., Attorney General, Secretary of State), or offices that engage in administrative tasks that should exert little, if any, bearing on policy administration that would influence the income earnings among affluent citizens in a given state (e.g., historic preservation, public libraries, elections administration); the following state executive agency offices are included: *administration, agriculture, banking, budget, commerce, comptroller, computer services, consumer affairs, economic development, education, employment services, energy, environmental protection, finance, general services, health, higher education, highways, insurance, labor, licensing, natural resources, personnel, planning, post audit, pre audit, public utilities, public welfare, purchasing, revenue, social services, solid waste, state police, and transportation.*

realmedianbureaucraticsalarysq (Real Median Bureaucratic Salary Squared)

alldemrev2 (Unified Democratic Control): Klarner's variable "dem_unified", Source, Harvard Dataverse, <https://dataverse.harvard.edu/dataset.xhtml?persistentId=hdl:1902.1/20403>

allrepubrev2 (Unified Republican Control): Klarner's variable "rep_unified", Source, Harvard Dataverse, <https://dataverse.harvard.edu/dataset.xhtml?persistentId=hdl:1902.1/20403>

dpcrev2 (Divided Partisan Control): Binary Indicator that = 1 when *both allrepubrev2 & alldemrev2* equal zero, = 0 otherwise

burprofalldemrev2 (Real Median Bureaucratic Salary X Unified Republican Control)

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burprofsqallreprev2 ($\{\text{Real Median Bureaucratic Salary}\}^2 \times \text{Unified Republican Control}$)

burprofsqalldemrev2 ($\{\text{Real Median Bureaucratic Salary}\}^2 \times \text{Unified Democratic Control}$)

hcrealmedianbureaucraticsalary (High Bureaucratic Leadership Capacity): Top Quartile Median ($\pi=0.825$) of Real Median Bureaucratic Salary

lcrealmedianbureaucraticsalary (Low Bureaucratic Leadership Capacity): Bottom Quartile Median ($\pi=0.125$) of Real Median Bureaucratic Salary

rmsb18 (Real Median Bureaucratic Salary for Abbreviated Set of 18 Agencies): includes the following state agencies: *agriculture, banking, budget, commerce, comptroller, consumer affairs, economic development, energy, environmental protection, finance, health, highways, insurance, labor, licensing, natural resources, revenue and transportation*, Sources same as for the variable **realmedianbureaucraticsalary**

rmsb8 (Real Median Bureaucratic Salary for Abbreviated Set of 8 Agencies): includes the following state agencies: *Banking, Budget, Commerce, Comptroller, Economic Development, Finance, Natural Resources, Revenue*, Sources same as for the variable **realmedianbureaucraticsalary**

burprof18allreprev2 (Real Median Bureaucratic Salary for Abbreviated Set of 18 Agencies \times Unified Republican Control)

burprof18alldemrev2 (Real Median Bureaucratic Salary for Abbreviated Set of 18 Agencies \times Unified Democratic Control)

burprof8allreprev2 (Real Median Bureaucratic Salary for Abbreviated Set of 8 Agencies \times Unified Republican Control)

burprof8alldemrev2 (Real Median Bureaucratic Salary for Abbreviated Set of 8 Agencies \times Unified Democratic Control)

rmsb18sq ($\{\text{Real Median Bureaucratic Salary for Abbreviated Set of 18 Agencies}\}^2$)

burprof18sqallreprev2 ($\{\text{Real Median Bureaucratic Salary for Abbreviated Set of 18 Agencies}\}^2 \times \text{Unified Republican Control}$)

burprof18sqalldemrev2 ($\{\text{Real Median Bureaucratic Salary for Abbreviated Set of 18 Agencies}\}^2 \times \text{Unified Democratic Control}$)

rmsb8sq ($\{\text{Real Median Bureaucratic Salary for Abbreviated Set of 8 Agencies}\}^2$)

burprof8sqallreprev2 ($\{\text{Real Median Bureaucratic Salary for Abbreviated Set of 8 Agencies}\}^2 \times \text{Unified Republican Control}$)

burprof8sqalldemrev2 ($\{\{\text{Real Median Bureaucratic Salary for Abbreviated Set of 8 Agencies}\}^2 \times \text{Unified Democratic Control}\}$)

hcrealmedianbureaucraticsalarysq ($\{\{\text{High Bureaucratic Leadership Capacity}\}^2\}$)

lcrealmedianbureaucraticsalarysq ($\{\{\text{Low Bureaucratic Leadership Capacity}\}^2\}$)

hcrmbssallreprev2 ($\text{High Bureaucratic Leadership Capacity} \times \text{Unified Republican Control}$)

hcrmbssalldemrev2 ($\text{High Bureaucratic Leadership Capacity} \times \text{Unified Democratic Control}$)

hcrmbssqallreprev2 ($\{\{\text{High Bureaucratic Leadership Capacity}\}^2 \times \text{Unified Republican Control}\}$)

hcrmbssqalldemrev2 ($\{\{\text{High Bureaucratic Leadership Capacity}\}^2 \times \text{Unified Democratic Control}\}$)

lcrmbssallreprev2 ($\text{Low Bureaucratic Leadership Capacity} \times \text{Unified Republican Control}$)

lcrmbssalldemrev2 ($\text{Low Bureaucratic Leadership Capacity} \times \text{Unified Democratic Control}$)

lcrmbssqallreprev2 ($\{\{\text{Low Bureaucratic Leadership Capacity}\}^2 \times \text{Unified Republican Control}\}$)

lcrmbssqalldemrev2 ($\{\{\text{Low Bureaucratic Leadership Capacity}\}^2 \times \text{Unified Democratic Control}\}$)

Construction of MTR_total_s_reed

This is the estimated time-varying marginal tax rate for a given state-year based on a methodology developed in Reed, Rogers and Skidmore (2011). This method derives a between (state) and within (time) varying measure of marginal tax rates for American states. This measure estimates each state's average marginal tax rate for a given year using corporate income taxes, personal income taxes, sales taxes, property taxes and all other remaining taxes, and then subsequently aggregates the estimates from each of these five components into an overall index. Personal income data come from the Bureau of Economic Analysis, http://www.bea.gov/iTable/index_regional.cfmstate; the source for state tax revenues and state and local tax revenue (which include personal income tax revenue, corporate income tax revenue, sales tax revenue, property tax revenue, and total tax revenue) is <http://www2.census.gov/pub/outgoing/govs/special60/>, then download “Govt Finances.zip;” the source for average marginal tax rates (including marginal tax rates on wages, dividend income

and pension income) is NBER TAXSIM (<http://users.nber.org/~taxsim/marginal-tax-rates/>), corporate income tax (including the number of corporate income tax brackets and the maximum statutory tax rate on corporate profits) comes from the Tax Foundation (<http://taxfoundation.org/article/state-corporate-income-tax-rates>); sales tax data (including the overall state-level sales tax rate and the state-level tax on food: via Council on State Governments, Knowledge Center (<http://knowledgecenter.csg.org/kc/category/content-type/bosarchive>); and, property tax revenues (DC Office of Revenue Analysis: <http://cfo.dc.gov/page/taxburdens-comparison>).

Specifically, $MTR_total_s = MTR_pincome_s + MTR_sales_s + MTR_cincome_s + MTR_property_s + MTR_other_s$, where $MTR_pincome_s$ is the average marginal state personal income tax; MTR_sales_s is the average state marginal personal sales tax, $MTR_cincome_s$ is the average state corporate income tax, $MTR_property_s$ is the average state marginal property tax; and, MTR_other_s is the average state marginal tax on all other income.

To obtain $MTR_pincome_s$, following Reed et al (2011), we proceed in two steps. First, we regress state personal income taxes on state fixed effects, state fixed effects interacted with state personal income based on fiscal year, the average marginal tax rate on wage income, wage income taxes, the average marginal tax paid on dividends, dividend taxes, the average marginal tax on pension income and pension income taxes; and, observations are weighted inversely proportionally to the variance of the inverse square root of overall fiscal income. In the second stage, we generate the average marginal state personal income tax for state-years in which there is a personal income tax by multiplying the regressors in the first stage for wage income taxes, dividend taxes and pension income taxes, times their corresponding average marginal tax rates for wages, dividends and pension income and, control for state fixed effects and state fiscal income. For state-years in which there is no personal income, the average marginal state personal income tax is set to zero.

To obtain MTR_sales_s , we again proceed in two steps. First, we regress state personal sales taxes on state fixed effects, state fixed effects interacted with state personal income based on

fiscal year, the average marginal tax rate on food, food taxes, the average marginal tax on sales and sales taxes; and, observations are weighted inversely proportionally to the variance of the inverse square root of overall fiscal income. The second stage follows (see discussion of second stage for **MTR_pincome_s**).

To obtain **MTR_cinome_s**, we again proceed in two steps. First, we regress state corporate income taxes on state fixed effects, state fixed effects interacted with state personal income based on fiscal year, the number of corporate tax brackets, the number of corporate tax brackets times overall state fiscal income, the maximum corporate statutory tax rate, the maximum corporate statutory tax rate time overall state fiscal income; and, observations are weighted inversely proportionally to the variance of the inverse square root of overall state fiscal income. The second stage follows (see discussion of second stage for **MTR_pincome_s**).

To obtain **MTR_property_s**, we proceed in two steps. First, we regress state property tax income on state fixed effects, state fixed effects interacted with state personal income based on fiscal year, the property tax rate per assessed value \times Assessment ratio (largest city in state), the property tax rate times overall state fiscal income; and, observations are weighted inversely proportionally to the variance of the inverse square root of overall state fiscal income. The second stage follows (see discussion of second stage for **MTR_pincome_s**).

To obtain **MTR_other_s**, we compute all other state taxes (denoted **taxes_other_s**) which is total state taxes net of state taxes on personal income, state sales taxes, state taxes on corporate income and state property. We then proceed in two steps. In step one, we regress **taxes_other_s** on state fixed effects and state fixed effects interacted state personal income based on fiscal year; and, observations are weighted inversely proportionally to the variance of the inverse square root of overall state fiscal income. The second stage follows (see discussion of second stage for **MTR_pincome_s**).

To generate **MTR_total_s** take the Stata program .do file, *“JPP_components_marginal_tax_rates_07_12_18.do”* and it will take the Stata database file

"*JPP_components_marginal_tax_rate_07_12_18.dta*" and transform it to
"*JPP_marginal_tax_rate_07_12_18.dta*"

Email Correspondence

Email describing income, nonfarm income and population data from the Bureau of Economic Analysis

July 19, 2012

To: Berkowitz, Daniel Michael

Attachments:

state_nfpi_1950_2011.xls (55 KB)[Open as Web Page]; state_pcpi_1950_2011.xls (52 KB)[Open as Web Page]; state_pop_1950_2011.xls (52 KB)[Open as Web Page]

Hi Daniel -

I have attached 3 Excel files that I created using our interactive tables routine on our website.

The 3 files include the following data:

- Total nonfarm personal income (NFPI) data for 1950-2011 for all states.
- Per capita personal income data (total personal income divided by total population) for 1950-2011 for all states.
- Total population data for 1950-2011 for all states.

To calculate per capita nonfarm personal income estimates, please do the following:

- Multiply NFPI data by 1,000 (data displayed in thousands of dollars)
- Divide NFPI by total population data.

I hope that these files are helpful to you. Please let me know if you have any questions.

Jeff

Jeff Newman
Bureau of Economic Analysis

Email describing why the share of nonfarm income can be slightly greater than one in about 28-percent of our observations for 49 states during 1986-2003.

Sent: Tuesday, February 19, 2013 8:31 AM

To: [Berkowitz, Daniel Michael](#)

Hi Daniel –

The data that I provided to you last July can be cited as:

“Bureau of Economic Analysis, March 28, 2012”

It is possible that nonfarm personal income can exceed total personal income. In these cases, farm income is negative due to negative farm proprietors’ income estimates. The negative farm proprietors’ estimates are large enough to negate farm wages and salaries.

We revised our 2009 – 2011 estimates on September 25th, as part of our normal estimating schedules. You can access the most recent nonfarm personal income and per capita personal income estimates on our [website](#) in the section “Annual State Personal Income and Employment.” The easiest table to access this data for states is Table SA04 (Personal income and employment summary).

Please let me know if you have any questions about our estimates.

Jeff

Jeff Newman

Bureau of Economic Analysis